



US Army Corps
of Engineers®

Engineer Research and
Development Center

Product

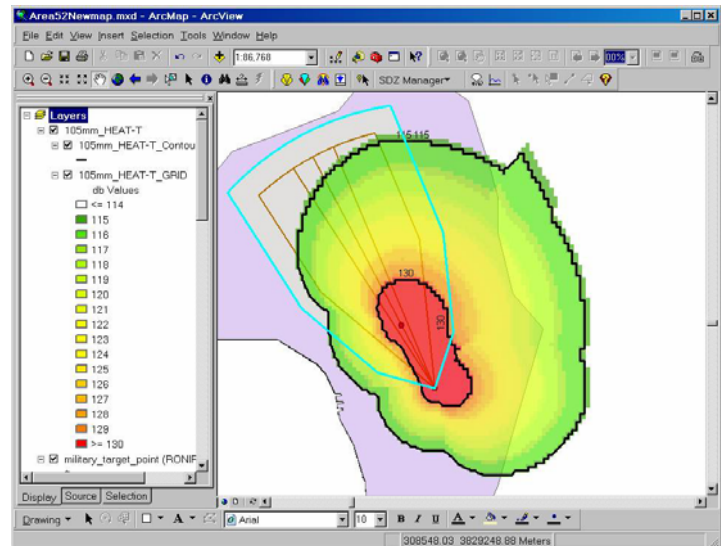
Range Managers Toolkit (RMTK) Software Noise Tool

Technology

The Range Managers Toolkit (RMTK) Noise Tool is a noise prediction and impact assessment software tool designed to enable Range Managers and trainers to quickly assess the noise impact of training or testing on any given day and for a variety of weather conditions, and also to plan preliminary range siting for noise. The noise model outputs a map display that designates acoustic regions in both decibels (dB) in a PK15(met) metric, and by color to indicate relative levels of complaint risk. This information is devised specifically to help Range Managers and trainers improve the scheduling (time and location) of training or testing.

Problem

Noise from military training and testing operations can significantly impact surrounding areas. Community annoyance response to noise, typically in the form of complaints, political pressure, legal action and damage claims, hampers mission execution. One element of an effective noise management strategy is the ability to accurately forecast and assess noise exposure to surrounding areas. The RMTK Noise Tool enables Range Managers and trainers to assess the noise impact of training or testing, and to plan preliminary range siting for noise.



RMTK Noise Tool output identifies levels of complaint risk.

Expected Cost To Implement

The *RMTK Noise Tool* is available to users with an Army Knowledge Online (AKO) login free of charge. The *RMTK Noise Tool* requires ArcView version 9 (or higher), a GIS and mapping application available from [Environmental Systems Research Institute, Inc. \(ESRI\)](http://www.esri.com). An ArcView single-user (government) license costs \$1244; multiple users price discounts are available.

Benefits/Savings

The *RMTK Noise Tool* provides users with a sophisticated noise prediction and impact assessment tool that is easy to use and simple to interpret. The tool enables Range Managers and trainers to predict the likelihood of receiving a noise complaint on any given day due to training. The *RMTK Noise Tool* is also designed to help land managers do preliminary range siting for noise. Note that RMTK Noise Tool output is not intended for general public release, or for use in official documents.

Status

The *RMTK Noise Tool* was released on the [Army Sustainable Range Program website](http://www.army.mil) on 09 September 2005.

ERDC POC(s) Dr. Michelle E. Swearingen, Acoustical Engineer, CERL, P.O. Box 9005, Champaign, IL, 61826-9005; Phone: 217-373-4521; FAX: 217-373-7222; e-mail:
Michelle.E.Swearingen@erdc.usace.army.mil

Distribution Sources The *RMTK Noise Tool* is available for download on the Army Sustainable Range Program (SRP) website with an Army Knowledge Online (AKO) login through URL:
<https://srp.army.mil/>

Available Documentation The *RMTK Noise Tool* is documented via online “Help” files within the program.

Available Training Skilled use of the *RMTK Noise Tool* is most often acquired through self-directed training using online instructional materials and “Help” files. Occasional training is available through the ITAM GIS Regional Support Centers (RSCs). The Eastern RSC is located at Fort A.P. Hill, VA, and the Western RSC at Colorado State University.

Available Support Support is available through the ITAM GIS Regional Support Centers:

The [Eastern RSC](#)
Fort A.P. Hill, VA
(804) 633-8730

The [Western RSC](#)
Colorado State University
(970) 491-7090